UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,910	06/15/2005	Bernard Parsons	4607/0729-US0	6548

76808 7590 01/29/2010

Leason Ellis LLP
81 Main Street
Suite 503
White Plains, NY 10601

EXAMINER	
HAILU, TESHOME	
ART UNIT	PAPER NUMBER
2434	

MAIL DATE	DELIVERY MODE
01/29/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/539,910	PARSONS ET AL.	
	Examiner	Art Unit	
	TESHOME HAILU	2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23,24,28,30-41,43 and 2626* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23, 24, 2626-28, 30-41 and 43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in reply to an amendment filed on September 30, 2009. Claims 23-24, 26-28 and 30-41 have been amended.

2. Claims 1-22, 25, 29 and 42 are canceled.

3. Claim 43 has been added.

4. Claims 23-24, 26-28, 30-41 and 43 are pending.

Response to Amendment

5. Applicant's arguments with respect to claims 23-24, 26-28, 30-41 and 43 have been fully considered but they are not persuasive.

6. Applicant argues that the arts on record, Gaskins (US 5,606,315 in view of Hale (US 5,355,414) and further in view of Gardner (US 7,272,832), are not combinable with one in order to teach the claim invention. Examiner respectfully disagrees.

7. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, examiner would point out that Gaskins disclosed the method of securing protected data stored in electronic device and Hale disclosed the system of preventing unauthorized access to the computer system by peripheral input device. Also Gardner disclosed the method of user application is able to create secure memory partitions and

processes to protect information in memory from all other applications and operating systems running on the system, even including the operating system under which it is running.

8. Applicant argues that the arts on record, Gaskins (US 5,606,315 in view of Hale (US 5,355,414) and further in view of Gardner (US 7,272,832) fails to teach the claim limitation, "means arranged to interact with the memory management unit of the portable computing device to acquire at least a portion of the memory and remove the memory from being available for use by the operating system". Examiner respectfully disagrees.

9. Examiner would point out that Gardner teach this limitation as, (column 21, line 20-26, using the ***memory management services*** of SPK 36, a user application is able to create ***secure memory partitions*** and processes to ***protect information in memory from all other applications and operating systems running on the system***, even including ***the operating system under which it is running***).

10. Also applicant amends the claim invention to include a portable computing device to the claim. However, claiming a portable or movable device is not sufficient by itself to patentably distinguish over a fixed device unless there are new or unexpected results produced. See MPEP 2144.04(V)(A).

> *In re Lindberg, 194 F.2d 732, 93 USPQ 23 (CCPA 1952) (Fact that a claimed device is portable or movable is not sufficient by itself to patentably distinguish over an otherwise old device unless there are new or unexpected results.).*

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 23-24, 26-28, 30-41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaskins et al (Gaskins) (US 5,606,315) in view of Hale (US 5,355,414) and further in view of Gardner (US 7,272,832).

As per claim 23 Gaskins discloses:

A security system for a portable computing device having an operating system and a memory available for use by the operating system for the electronic device, the memory being accessible by the operating system via a memory management unit of the portable computing device, the security system comprising: a means arranged to interact with the memory management unit of the portable computing device to acquire at least a portion of the memory and remove the memory from being available for use by the operating system; (column 1, line 5-7, the invention relates to a method of operating an electronic control module and particularly to a method of securing protected data stored in such a module) and (column 3, line 32-35, the ROM 16 also contains security logic which is used to prevent unauthorized access to sensitive data stored in the EEPROM 20. The EEPROM has an address for a password, and addresses for sensitive data, particularly calibration parameters, as well as addresses for non-sensitive data).

An access system arranged to control access to the acquired memory independently of an operating system of the electronic portable computing device; (abstract, line 1-5, a microprocessor based electronic control module with an EEPROM for storing protected data allows the data to be used

internally, and allows non-sensitive data to be accessed by external communication tools, but prohibits access to the protected data unless a password is first entered).

A filter driver configured to intercept read/write operations to the memory of the portable computing device and interact with the acquired portion of the memory based on the intercepted read/write operations independent of the operating system. (Column 3, line 48-65, the messages are routed to the security logic program which filters the messages, passing those dealing with non-sensitive data, and evaluating whether other messages should be honored).

Gaskins fail to teach the system of intercepting read/write operations to the memory and acquiring memory independently of an operating system of the electronic device. However, in the same field of endeavor, Hale teaches this limitation as, (column 2, line21-28, the security measures generally involve the keyboard controller preventing transfer of any data to the host computer from the peripheral input devices connected to the keyboard controller. In other words, while security is active, the keyboard controller does not allow any transfers to the host computer via the keyboard controller) and (column 7, line 30-35, the security system instructions to carry out the operations illustrated in the flowcharts are stored in the memory 220 and executed by the keyboard controller 120, independent of the host operating system).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention was made, to modify the teaching of Gaskins and include the system of intercepting read/write operations to the memory and acquiring memory independently of an operating system of the electronic device using the teaching of Hale in order to secure the system by making the memory virtually inaccessible to the device operating system (see column 2, line 55-63).

The combination of Gaskins and Hale teaches securing a memory as (column 3, line 32-35 of Gaskins and column 4, line 9-15, of Hale), but fails to disclose removing the memory form being available for use by the operating system. However, in the same field of endeavor Gardner teach this limitation as, (column 21, line 20-26, using the memory management services of SPK 36, a user application is able to create secure memory partitions and processes to protect information in memory from all other

applications and operating systems running on the system, even including the operating system under which it is running).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of invention was made, to modify the teaching of Gaskins and Hale to include the system for removing the memory from being available for use by the operating system using the teaching of Gardner in order to prevent unauthorized access to the data by other users and system administrator (see column 2, line 15-32 of Gardner).

Claims 34 and 43 are rejected under the same reason set forth in rejection of claim 23:

As per claim 24 Gaskins in view of Hale and further in view of Gardner discloses:

A system as claimed in claim 23, wherein the means arranged to interact with the portable device is arranged to interact directly with the operating system. (column 1, line 5-7, This invention relates to a method of operating an electronic control module and particularly to a method of securing protected data stored in such a module) and (column 3, line 25-32, The microprocessor unit (MPU) communicates with the rest of the system by an 8 bit bi-directional data bus).

Claim 35 is rejected under the same reason set forth in rejection of claim 24:

As per claim 26 Gaskins in view of Hale and further in view of Gardner discloses:

A system as claimed in any claim 23, wherein the memory management unit is manipulated to remove references to the acquired memory. (Abstract, 11-15, when a password can not be found and it is necessary to change the protected data, the unit can be recovered by a recover procedure wherein the secure data is first erased and then the security is deactivated to grant free access).

Claim 37 is rejected under the same reason set forth in rejection of claim 26:

As per claim 27 Gaskins in view of Hale and further in view of Gardner discloses:

A system as claimed in claim 23, wherein the access system is arranged to control access to at least selected registers of the memory management unit. (Abstract, line 1-7, a microprocessor based electronic control module with an EEPROM for storing protected data allows the data to be used internally, and allows non-sensitive data to be accessed by external communication tools, but prohibits access to the protected data unless a password is first entered).

Claim 38 is rejected under the same reason set forth in rejection of claim 27:

As per claim 28 Gaskins in view of Hale and further in view of Gardner discloses:

A system as claimed in claim 23, wherein the acquired memory is hidden from the operating system. (abstract, line 1-5, a microprocessor based electronic control module with an EEPROM for storing protected data allows the data to be used internally, and allows non-sensitive data to be accessed by external communication tools, but prohibits access to the protected data unless a password is first entered).

Gaskins fail to teach the system of acquiring memory independently of an operation system of the electronic device. However, in the same field of endeavor, Hale teaches this limitation as, (column 7, line 30-35, the security system instructions to carry out the operations illustrated in the flowcharts are stored in the memory 220 and executed by the keyboard controller 120, independent of the host operating system).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention was made, to modify the teaching of Gaskins and include the system of acquiring memory independently of an operating system using the teaching of Hale in order to secure the system by making the memory virtually inaccessible to the device operating system (see column 2, line 55-63).

Claim 39 is rejected under the same reason set forth in rejection of claim 28:

As per claim 30 Gaskins in view of Hale and further in view of Gardner discloses:

A system as claimed in claim 23, wherein the portable device comprises a selected one of a personal digital assistant (PDAs), a mobile telephone and a laptop. (Abstract, line 1-7, microprocessor based electronic control module with an EEPROM for storing protected data allows the data to be used internally).

As per claim 31 Gaskins in view of Hale and further in view of Gardner discloses:

A system as claimed in claim 23, wherein the access system is arranged to protect at least selected registry settings associated with the acquired memory such that they cannot be modified by other applications. (Column 1, line 5-8, the invention relates to a method of operating an electronic control module and particularly to a method of securing protected data stored in such a module).

Claims 32, 40 and 41 are rejected under the same reason set forth in rejection of claim 31:

As per claim 33 Gaskins in view of Hale and further in view of Gardner discloses:

A system, as claimed in claim 23, wherein the memory acquired, is used to store the encryption/decryption key or keys of the encryption system. (Abstract, line 5-9, the data may be read from memory and the data or the password may then be changed. For a given model of control module, an ID number is assigned to the password and stored in the module).

As per claim 36 Gaskins in view of Hale and further in view of Gardner discloses:

A method as claimed in claim 34, wherein the step of interacting includes interacting directly with a memory management unit of the device. (Column 3, line 38-43, the EEPROM has an address for a password, and addresses for sensitive data, particularly calibration parameters, as well as addresses for non-sensitive data. The RAM 18 temporarily stores data which may be read from various locations determined in accord with the program stored in the ROM).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TESHOME HAILU whose telephone number is (571)270-3159. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Teshome Hailu/

Examiner, Art Unit 2434

/Kambiz Zand/
Supervisory Patent Examiner, Art Unit 2434